



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/681,455 | 10/07/2003 | Manabu Kanno | 02033D/HG | 9353 |
| 1933 | 7590 | 05/03/2004 | EXAMINER | |
| FRISHAUF, HOLTZ, GOODMAN & CHICK, PC 767 THIRD AVENUE 25TH FLOOR NEW YORK, NY 10017-2023 | | | KASTLER, SCOTT R | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1742 | |

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/681,455 | KANNO ET AL. |
| | Examiner | Art Unit |
| | Scott Kastler | 1742 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-8 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 October 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 10/058,438.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10/7/03</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-7 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Weir.

Weir teaches an autoclave (pressure vessel) in the embodiment of figure 1 for example, including at least three stirrers (the “comprising” language of the instant claims allows for the additional stirrers of Weir) (34, 36, 38, 40, 42) separated by partitions (24, 26, 28, 30) to provide three or more compartments within the pressure vessel each with a stirrer therein, where the stirrers each have a plurality of blades (figure 1 clearly shows at least two blades on each stirrer and it has been well settled that drawings can anticipate features of claims if they clearly show what is claimed, see MPEP 2125), an oxygen supply pipe and ports (48, 50, 52, 54, 56, 58) having oxygen inlet ports which open below the stirrers, a discharge pipe (46) which has a drain port located in a lower portion of the pressure vessel (see figure 1), an a charge pipe (44) having an inlet port which opens within the vessel (see figure 1), thereby showing all properly limiting aspects of the above claims since it has been well settled that the manner or method of use of an apparatus (in the instant case, use of the pressure vessel for the leaching of zinc concentrates in any particular manner) cannot be relied upon to fairly further limit claims to the apparatus itself.

See MPEP 2114, and *In re Casey*, 152 USPQ 235.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weir in view of any of Lueders et al, Thomassen et al or Chalkley et al. As applied to claim 1 above, Weir shows all aspects of the above claims except to specifically recite that the pressure vessel (autoclave) is lined with titanium. Each of Lueders et al (col. 6 lines 19-20), Thomassen et al (Example I, col. 4 lines 14-15) or Chalkley et al (Example I, col. 8 lines 14-15) teach that it was known in the pressure vessel art to line pressure vessels intended to be employed for the leaching of concentrates with titanium in order to provide corrosion resistance to the pressure vessels and thereby improve service life. Because corrosion resistance and improved service life would also be desirable in the pressure vessel described by Weir, motivation to include a titanium lining, as suggested by each of Lueders et al, Thomassen et al or Chalkley et al, in the pressure vessel described by Weir, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weir in view of Cole. As applied to claim 1 above, Weir shows all aspects of the above claims except to locate the charge pipe so that it has an inlet port opening into a lower part of a first compartment. Cole teaches, that in pressure vessels I which oxygen is injected into the vessel, it was known in the art at the time the invention was made to locate the charge pipe in such a manner that an inlet

Art Unit: 1742

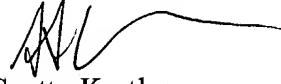
port of the charge pipe opens into a first compartment of the pressure vessel (see figure 2 and claim 42 for example) and that such an arrangement improves the thermal efficiency and overall effectiveness of the pressure vessel (see col. 2 lines 23-25 for example). Because improved thermal efficiency and an increase in overall effectiveness would also be desirable in the pressure vessel of Weir, motivation to deploy the charge pipe (44) of Weir, so that it has an inlet port opening into a first compartment of the pressure vessel of Weir, as taught by Cole, would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Scott Kastler
Primary Examiner
Art Unit 1742

sk